

What is claimed is:

1. A picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices, comprising:
- 5 a network where a plurality of logical channels are established in a time division multiplex method;
- a distribution device distributing picture data via a logical channel designated by a distribution instruction; and
- 10 a plurality of receiving devices receiving picture data from respective logical channels designated by receiving instructions.
- 15 2. The picture distribution system according to claim 1, wherein
- said network is a ring-shaped transmission line.
3. The picture distribution system according to claim
- 20 1, further comprising
- a determination unit determining a number of logical channels to be established in said network.
4. The picture distribution system according to claim
- 25 1, further comprising

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5 5. The picture distribution system according to claim  
1, further comprising:  
a determination unit determining a number of  
logical channels to be established in said network  
depending on a number of picture data to be  
10 transmitted;  
an allocation unit allocating respective bands  
used to transmit picture data to the plurality of  
logical channels; and  
a generation unit generating a distribution  
15 instruction based on said determination unit and  
allocation unit and sending the distribution  
instruction to said distribution device.

20 6. The picture distribution system according to claim  
5, wherein  
priority is given in advance to the plurality of  
logical channels, and  
said allocation unit allocates respective bands  
to the plurality of logical channels based on the  
25 priority given to each logical channel.

7. The picture distribution system according to claim 5, wherein

priority is given in advance to the plurality of receiving devices; and

5       said allocation means allocates respective bands to said plurality of logical channels based on the priority given to each receiving device.

10       8. The picture distribution system according to claim 5, wherein

      said distribution device generates a receiving instruction according to a received distribution instruction and transmits the receiving instruction to a corresponding receiving device via said network.

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9. A distribution device which is used in a picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices via a network where a plurality of logical channels are established by a time division multiplex method, comprising

20       a distribution unit distributing picture data to a plurality of receiving devices with a function to receive picture data from a logical channel designated  
25       by a receiving instruction via a logical channel

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10. A receiving device which is used as one of a plurality of receiving devices in a picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices via a network where a plurality of logical channels are established by a time division multiplex method, comprising

a receiving unit receiving a set of picture data from a logical channel designated by a receiving instruction, the set of picture data being transmitted from a distribution device with a function to distribute picture data via a logical channel designated by a distribution instruction.

11. A picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices, comprising:

a network where a fixed-length frame composed of a plurality of time slots are transmitted;

one or more distribution devices storing first picture data in a first time slot of the fixed-length frame, storing second picture data in a second time slot of the fixed-length frame, and transmitting the

fixed-length frame to the network; and

5 a plurality of receiving devices receiving the respective picture data from the first or second time slots of the fixed-length frame according to a receiving instruction.

12. The picture distribution system according to claim 11, wherein

10 if third picture data are requested to be distributed while the first and second picture data are being distributed, said one or more distribution devices store the first picture data in the first time slot of the fixed-length frame, store the second and third picture data in the second time slot of the  
15 fixed-length frame, and transmit the fixed length frame to said network.

13. A picture distribution method for distributing picture data from a distribution device to a plurality  
20 of receiving devices, comprising:

establishing a plurality of logical channels by a time division multiplex method;

distributing picture data via a logical channel designated by a distribution instruction; and

25 a plurality of receiving devices receiving

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14. The picture distribution method according to claim  
5 13, further comprising:  
determining a number of logical channels to be  
established according to a number of picture data to  
be transmitted;  
allocating respective bands used to transmit  
10 picture data to a plurality of logical channels to be  
established; and  
generating the distribution instruction based on  
the determined number of logical channels and  
allocated bands.